1-6145

**MONSANTO**

**FROM:** Gordon A. Grundmann (4-6112) MCC Engineering F3WB

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**DATE:** January 31, 1992

cc: A. Faust
J. Hanson
S Smith

**SUBJECT:** Preliminary Scope of Work

**REFER:** CEA 8777 Sauget Sites - Dead Creek

**TO:** Jim Fritsch

Attached are 4 copies of the 1/31/92 issue of the Preliminary Scope of Work for the potential project at Dead Creek. This document is to be used to obtain ballpark estimates to perform the sediment removal work at Dead Creek. Incorporated in this document are the comments I received from all of you.

Please send the document out for the ballpark estimates. If you have additional questions, give me a call. I would like to see your cover letter before you send it.

Thanks.

Gordon

Gordon

Attachment

CER 006425

## PROPOSAL INFORMATION

JANUARY 31, 1992

The following information is required to be forwarded with your proposal.

A. A preliminary cost estimate to do the work covered in the attached Preliminary Scope of Work dated January 31, 1992.

When the cost estimates are submitted, it will be necessary to separate out various segments of the work as follows:

1. Design cost for the Workplans which will include such documents as the HASP and QAPP.
2. Actual field work including set-up of the site, excavation of sediments, dewatering and water management, backfilling, and loading of the sediments on trucks.
3. Transportation costs to landfill.
4. Disposal costs at landfill.

B. Please outline the days per week and the hours per day planned for doing this work. As noted in the Introduction, the actual field work will be scheduled for the 2nd and 3rd quarters of 1993.

C. An organization chart will be required which outlines the relationship of personnel who will be working and interfacing on this project.

D. This proposal information is not to be a formal quotation. Instead it is intended to be used as preliminary cost information which will be used by Monsanto to request management approval of this project.

E. It is not anticipated that any further visits to the site are necessary to meet the requirements of this proposal.

PRELIMINARY SCOPE OF WORK

SAUGET PROJECT SITES

SAUGET/CAHOKIA, ILLINOIS

JANUARY 31, 1992

## I. INTRODUCTION

This preliminary scope of work is related to two sites: a portion of Dead Creek - Sector B (DC-B) and Site M. Both sites are shown on the attached Figure 1 drawing and are part of the Sauget Project Sites as identified by the Illinois Environmental Protection Agency (IEPA).

The intent of the project is to remove, dewater and dispose of accumulated sediments from the southern portion of Dead Creek - Sector B and from all of Site M. These sediments may be affected by organic compounds and metals. At this time it is not anticipated that any water will be removed from the sites.

Only the southern 1,600 feet of Dead Creek - Sector B will be a part of this project since access is currently not available to the northern portion of Dead Creek - Sector B. Work in this northern area will be deferred to a future time. It is also planned to remove sediments from all of Site M. See attached Figure 1.

Details follow this introduction covering the removal, dewatering, transportation, and disposal of the sediments in an approved landfill.

The execution information and the preliminary cost estimate generated by this inquiry will be used to request Monsanto management approval of this project.

If approval is granted, a formal Request For Proposal (RFP) will be issued and a contractor selected after bid reviews. The successful contractor will then be authorized to execute the design portion of the project covering workplans, including the Health and Safety Plan (HASP) and the Quality Assurance Project Plan (QAPP).

It will be necessary to obtain IEPA approval of all workplans. This work includes all required revisions and modifications.

Based on these workplans and other design data, Monsanto will negotiate a Consent Decree (CD) with the IEPA. If the CD has been approved and all access agreements resolved, a second order would authorize the contractor to perform the actual removal work at the Sauget sites. The work will be performed in accordance with the CD.

The project approval, formal issue of the RFP, and Consent Decree negotiations are expected to take place in 1992. The actual construction work in the field is planned for the 2nd and 3rd quarters of 1993.

The contractor would guarantee that his work, equipment, personnel, etc., meet the requirements of the Consent Decree, Scope of Work, Schedules and Work Plans developed in accordance with these documents.

## II. EXISTING SITE INFORMATION

The sites for this project are located within the Sauget Project sites as referred to by the IEPA. They are located in the towns of Sauget and Cahokia in St. Clair County, Illinois, and are located directly across the river from St. Louis, Missouri.

Dead Creek at one time ran towards the south and southwest through the Illinois towns of Sauget and Cahokia. The IEPA has divided Dead Creek into 6 segments for ease of identification. This project is concerned with only a portion of Dead Creek - Sector B (DC-B). This sector runs parallel to Falling Springs Road and is located between New Queeny Avenue and Judith Lane. The applicable portion of DC-B is approximately 1,600 feet long and is currently enclosed by a chain link fence. Dead Creek is not a free-flowing stream in this sector since the culverts at both the north and south ends have been blocked. As a result, the only sources of water for the DC-B are rainwater or groundwater. Normally, most of the creekbed is not under water.

Site M is adjacent to the DC-B portion of the project and is located on its east side near the southern portion of DC-B. Site M was a sand pit which was excavated in the 1940s. The dimensions of the pit are approximately 275 feet x 350 feet. This pit is presently full of water and has an estimated depth of 15 feet maximum.

A study has been completed which characterizes the conditions at both project sites by determining the nature, extent and volume of the sediment that is present. The excavated sediment materials will be disposed of at an approved hazardous waste landfill.

## III. DESIGN AND CONSTRUCTION REQUIREMENTS

Following are excerpts (Sections E & F) from a Request For Proposal (RFP) document that is being prepared for use when future bids are formally requested. Sections A through D of this document are not applicable at this time and are not attached.

E. Design Requirements

Following are the basic design requirements that must be executed as the first phase of work after the selection of a contractor. This design information will be used to negotiate the CD.

1. Prepare the appropriate workplans prior to doing this work in accordance with EPA guidelines. This would include, for example, workplans such as the Health and Safety Plan (HASP), the Quality Assurance Project Plan (QAPP), etc.

2. Prepare layout drawings to show how the facilities will be located. This layout would show roads, fences trailers, supply storage area, etc. See Figure 2.

3. Advise what personnel will be on-site to insure an efficient and safe execution of the work, such as a safety and/or industrial hygienist person.

4. Outline contingency plans in the event there is an accident which would cause a spill during the transport period.

5. Ensure that all federal, state, local and/or other regulatory requirements that may apply will be met.

6. Provide a schedule of the activities to accomplish the scope of work. Dewatering of the sediment materials could be done in the warm months of the summer, or sooner if this would be advantageous.

7. Define plans for industrial hygiene, safety, dust and odor control, etc. The air monitoring itself will be installed and monitored by others.

F. Construction Requirements

Provide all labor, materials, equipment and supervision required to set up the necessary facilities and execute the work in accordance with the Consent Decree design, specifications, and construction requirements.

1. Setup of site

   a. Setup all temporary facilities, including roads (including access and egress of trucks), any decontamination facilities, offices, security facilities, and any other facilities required for personnel protection, safety, maintenance, and storage of supplies. See Figure 2 for proposed layout for site. The contractor will provide temporary trailer office space and telephone service for Monsanto, Geraghty & Miller, and IEPA personnel.

b. Monsanto will be responsible for obtaining any required legal agreements for the right to work in the Dead Creek - Sector B and Site M areas, the right to set up temporary facilities in any adjacent land area, and approval rights to build access and/or egress roads. Adjacent land areas used for set up of temporary facilities must be entirely fenced by contractor with a cyclone type fence with controlled gate access. See Figure 2.

c. Setup all the support utilities required to assure that the site work can be carried out in a safe and efficient manner.

d. Provide all on-site services, protective clothing and monitoring equipment required to insure the safety of all construction personnel. The Personal Protective Equipment (PPE) will be included in the profile with the sediment so it can be transported to the same disposal site.

e. Access to the sites must be restricted to the public at all times during the project.

f. All dewatering and/or storage of creek sediments must be contained within the fencing currently installed around the creek boundaries.

2. <u>Excavation of Sediments</u>

a. Clearing and grubbing of brush and trees must be done where necessary to facilitate removal of sediments from the appropriate portions of Dead Creek - Sector B and Site M. Clearing will also be required where contractor feels it is necessary to set up and have access to sediment dewatering areas.

Any brush or trees, which are cleared above ground, must be cut down to ground level and run through a chipper for disposal on site. Any below ground roots, etc., must remain on site and be handled as little as possible. If some below ground roots are excavated with the sediment, they should be landfilled with the creek sediments.

b. Proposal to be based on removal of surface sediments from Dead Creek - Sector B for an area 20 feet wide by 1600 feet long. The average estimated depth of sediments for proposal purposes will be 2 feet. Actual sediment excavation will be directed by a Geraghty & Miller consultant familiar with the physical characteristics (color, texture, and consolidation) that distinguish the creek sediments from the underlying soils. It is not expected that removal will be required from the steep sides of the creek. The estimated quantity of sediment is

4,000 tons.

c. Proposal to be based on removal of 5,000 tons of sediments from the bottom of Site M in basic accordance with a map showing the general contour and depth of the sediments. Actual sediment excavation will be directed by a consultant as outlined in paragraph b. See Figures 3, 4 and 5. The sediment thickness ranges from approximately 1 foot deep to a maximum of 6 feet deep. The water in the pond reaches a maximum depth of 15 feet. See Figure 6.

Access to three sides of the southern portion of Site M can be accomplished by adding clean fill material along the south bank of the pond.

3. Dewatering and Water Management

a. All of the sediment materials must be dewatered such that they can pass a paint filter test prior to being loaded and transported to a disposal site.

b. Explain the method(s) by which the sediments will be dewatered. In order not to spread any affected materials, the sediment must be dewatered within the confines of the creek sides.

c. If it is necessary to remove water from the creek, it can be pumped to the north end of the creek over a berm which may be built by the contractor across the creek at a location 1,600 feet north of Judith Lane.

d. The subject of surface water must be addressed. It is advantageous to minimize the surface water that flows into the creek. Some surface water flows into the creek from the areas north of Dead Creek - Sector B from Queeny Avenue. The contractor should propose ways to divert this water away from the creek.

e. None of the water in Dead Creek Sector B or Site M will be treated in any manner.

4. Backfilling

a. It will not be necessary to backfill any of the areas in Site M where sediments have been removed. Any areas such as the banks, which are work damaged, must be dressed up, dirt added if necessary, and reseeded.

b. It will be necessary to backfill the areas of the creek Sector B where sediment has been removed with the same amount of material as was removed. For estimate purposes, this will be 2 feet of

compacted, clean dirt. Backfill dirt shall be placed in maximum of 12" uncompacted lifts and shall be compacted to 95% standard proctor at optimum moisture content. Any of the steep creek sides, which have been damaged during the excavation process, must be dressed and seeded in such a manner to prevent future erosion of the creek banks.

5. Loading and Transportation

   a. The sediment materials excavated from both Site M and Dead Creek - Sector B must be dewatered to pass the paint filter test and have no free liquids prior to loading on trucks for transport to the disposal area.

   b. Details of the truck loading plans must be outlined. This includes access to and egress from the loading area.

   c. Detailed transportation plans must be outlined for transporting the sediments to the landfill. The number and frequency of trucks should be addressed as well as how the trucks will be tracked from the time they leave the site until they reach the disposal site.

6. Disposal

   a. Disposal operations must be outlined. The excavated sediment materials will be disposed of at a Monsanto approved hazardous waste landfill.

   b. If for some reason water must be removed from a truckload at the disposal site, the steps and costs that will be used to correct this problem must be outlined by the contractor.

7. Site Clearance

   a. After the project has been completed, all temporary facilities must be removed. This includes offices, roads, equipment, decontamination facilities, supplies, etc. In general, the site must be returned to the condition it was in prior to the execution of the field work.

   b. The perimeter fence and gates used around the support area must be removed after project completion. The cyclone fence and/or gates now installed must be reinstalled or replaced so that the fence is back in the original location.

8. Ancillary Information

a. The IEPA will have personnel on site for most of the duration of this project to observe its execution. In addition, Monsanto personnel and a Geraghty & Miller consultant will be on the site as required to observe the project execution. One of the primary duties of the consultant will be to determine when the sediment has been sufficiently removed.

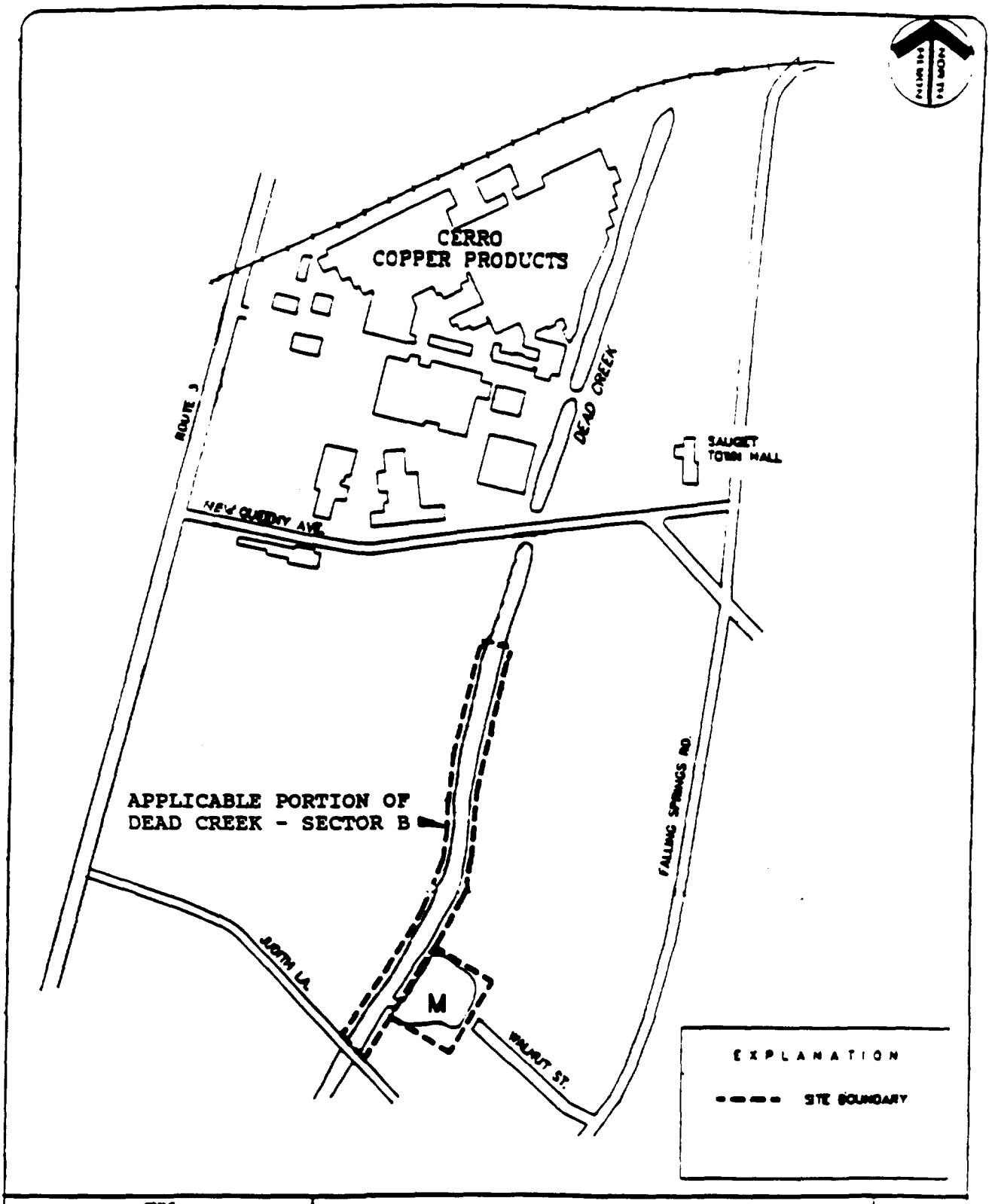
b. The contractual agreement will include insurance for contractual liability and environmental impairment.

c. Safety of personnel on site will be a high priority on this project. It is expected that steps will be taken to insure that this will be a safe operation. Provide past safety data information with bid proposal.

d. The contractor will be responsible for site security. It is likely that around the clock security coverage will be required.

e. A topographical map of the sites and surrounding area showing the land contours is attached as Figure 3.

f. The contractor will be responsible for industrial hygiene, safety, dust and odor control, etc. The air monitoring itself will be installed and monitored by others.

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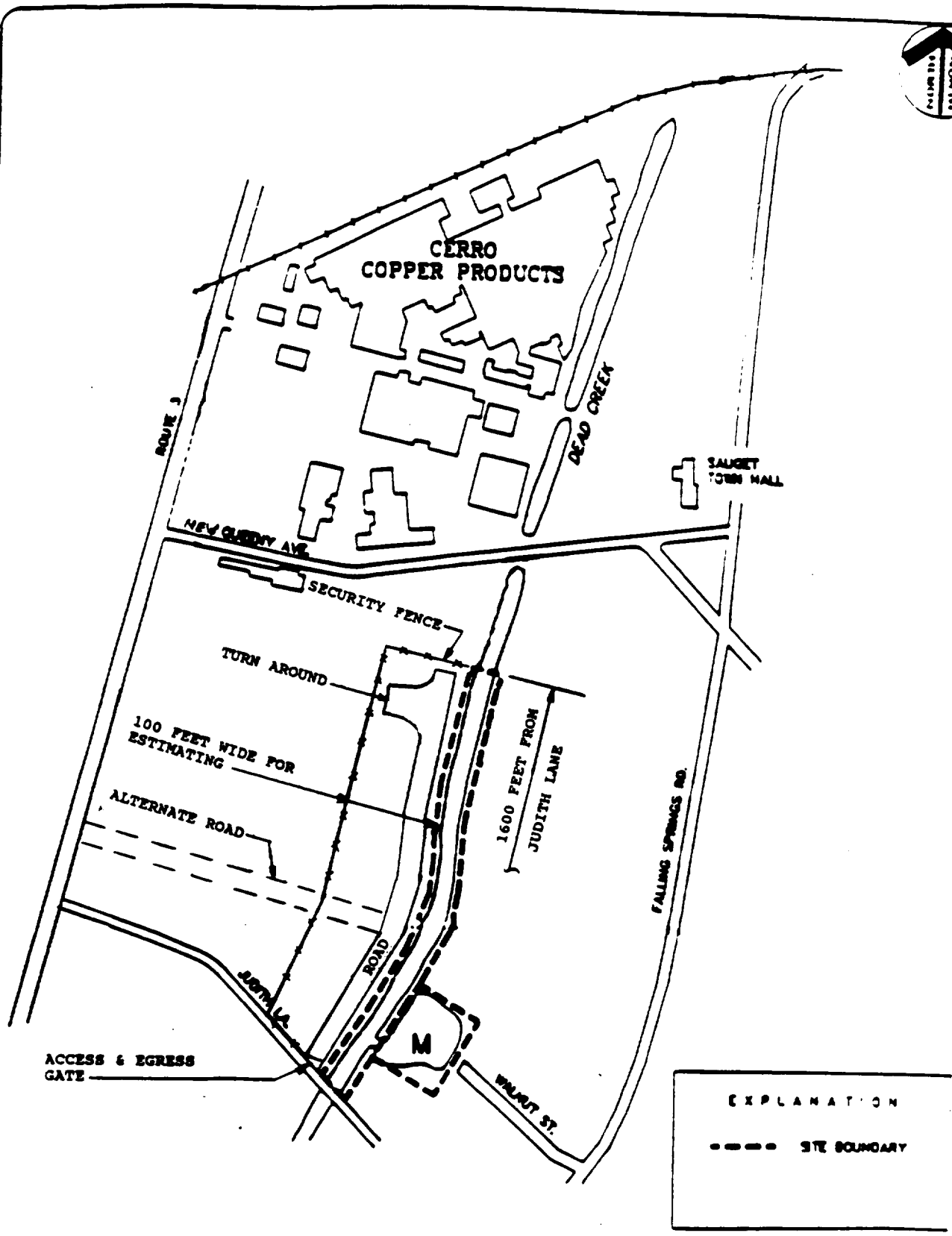


SAUGET PROJECT SITES
PROPOSED LAYOUT FOR SITE

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FIGURE 2

SITE M SEDIMENT THICKNESS ( VIEW FROM NE )

FIGURE 4

SITE M SEDIMENT THICKNESS FIGURE 5

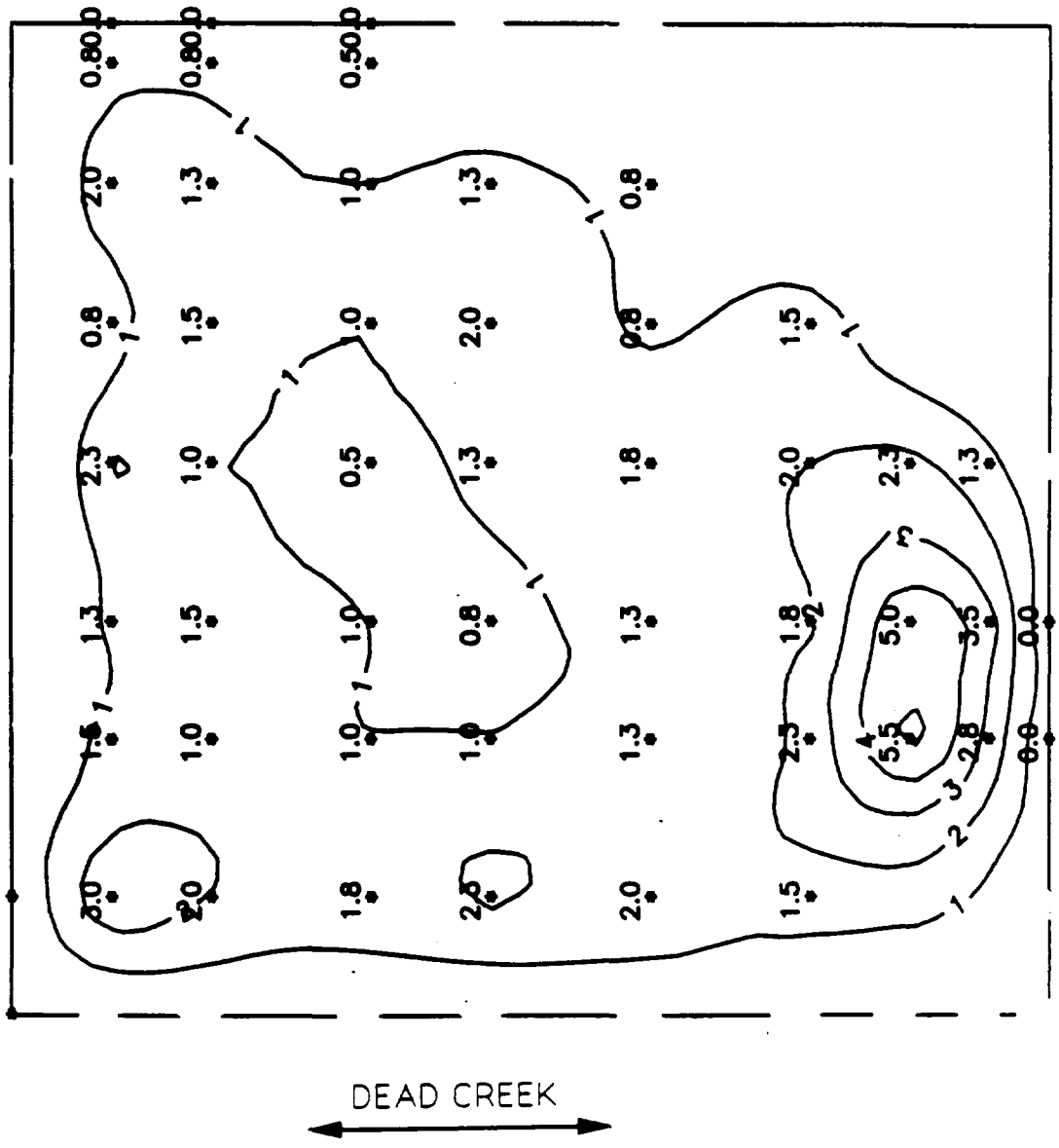


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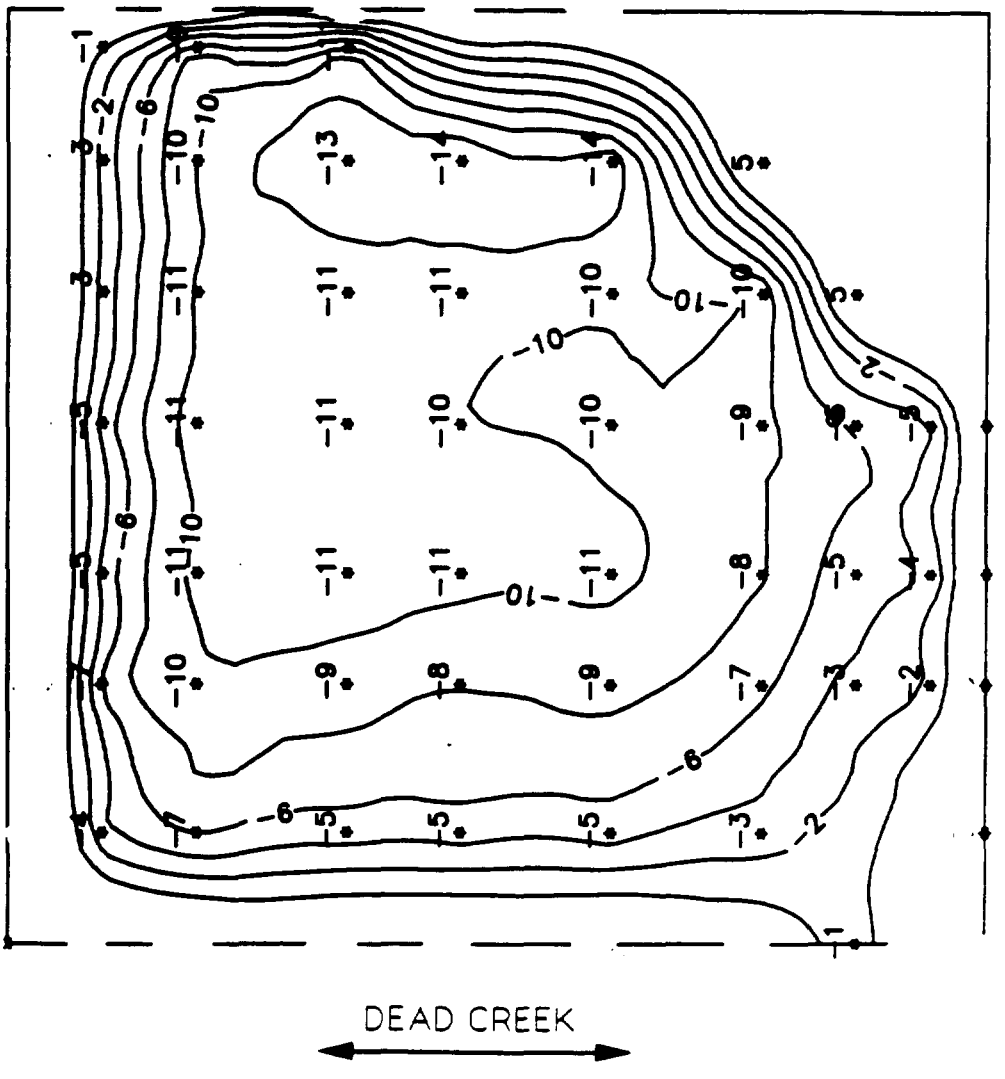
FIGURE 6

M BOTTOM SURFACE (depths from water surface)

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